

ABSTRACT

A vapor grown fine carbon fiber including a hollow space along the fiber in its interior, and having a multi-layer structure, an outer diameter of 2 to 500 nm, and an aspect ratio of 10 to 15,000 is disclosed. The fiber has a center portion and a peripheral portion, and the center portion having a carbon structure different from that of the peripheral portion. A method for producing the fine carbon fiber, and a battery and gas occlusion material containing the fine carbon fiber are also disclosed.